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THE UNITED STATES OF AMERICA

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February 16, 2005

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APPLICATION NUMBER: 60/536,843

FILING DATE: *January 16, 2004*

RELATED PCT APPLICATION NUMBER: *PCT/US05/01665*



Certified by

Don W. Dudas

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PTO/SB/16 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

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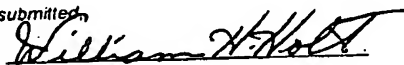
32782 U.S. PTO
60536843

INVENTOR(S)				
Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)		
William M.	HEYN	Norwalk CT 06854		
Additional inventors are being named on the _____ separately numbered sheets attached hereto				
TITLE OF THE INVENTION (500 characters max)				
OVERCAP FOR ENHANCING FLEXIBLE LID PERFORMANCE				
Direct all correspondence to: CORRESPONDENCE ADDRESS				
<input checked="" type="checkbox"/> Customer Number: 25628				
OR				
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ENCLOSED APPLICATION PARTS (check all that apply)				
<input checked="" type="checkbox"/> Specification Number of Pages 3		<input type="checkbox"/> CD(s), Number _____		
<input type="checkbox"/> Drawing(s) Number of Sheets _____		<input type="checkbox"/> Other (specify) _____		
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76				
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT				
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		FILING FEE Amount (\$)		
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees.		\$80.00		
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 082670				
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.				
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.				
<input checked="" type="checkbox"/> No.				
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____				

(Page 1 of 2)

Respectfully submitted,

SIGNATURE



TYPED or PRINTED NAME William H. Holt

TELEPHONE 703 838 2700

Date January 16, 2004

REGISTRATION NO. 20,766

(if appropriate)

Docket Number: Heyn - P2

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Docket Number

INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle (if any))	Family or Surname	Residence (City and either State or Foreign Country)

(Page 2 of 2)

Number _____ of _____

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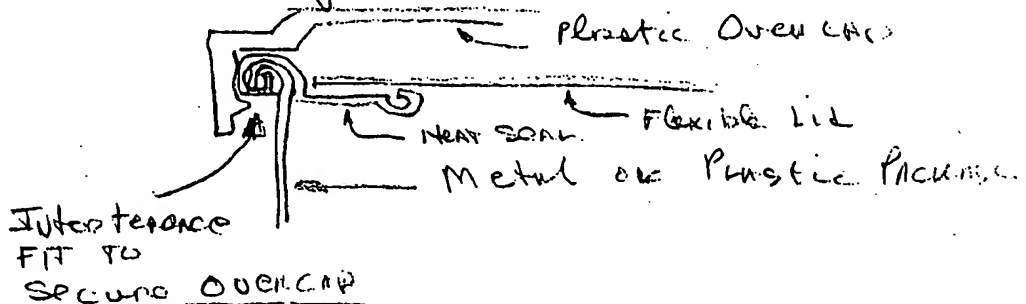
TITLE: OVERCAP DESIGN FOR ENHANCING Flexible LID PERFORMANCE

William M. HEYN

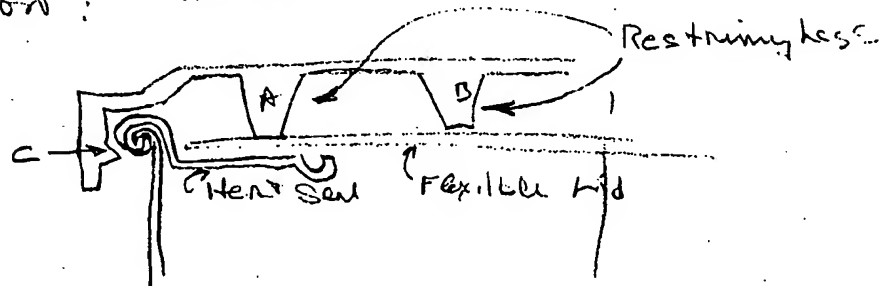
Page 1/3

Current Design:

1. Metal Ring + Foil Panel on Plastic or Metal Container

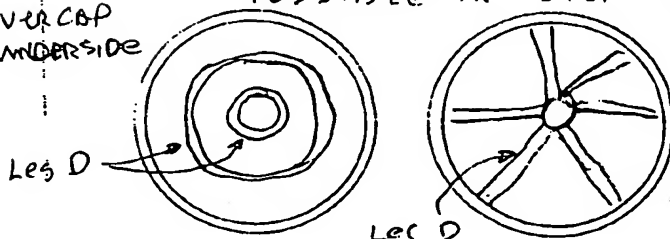


Innovation:



- ADDITION OF Restraining leg A to clamp seal AND Retard opening FROM INTERNAL PRESSURE POSSIBLE IN DROP IMPACT. Relationship between Leg A + Interference C. OR/BOTH TO SET CLAMP FORCE.
- ADDITION OF RESTRAINING leg B to prevent Flexible LID FROM MOVING UPWARD, DURING INTERNAL PRESSURE POSSIBLE IN DROP IMPACT.

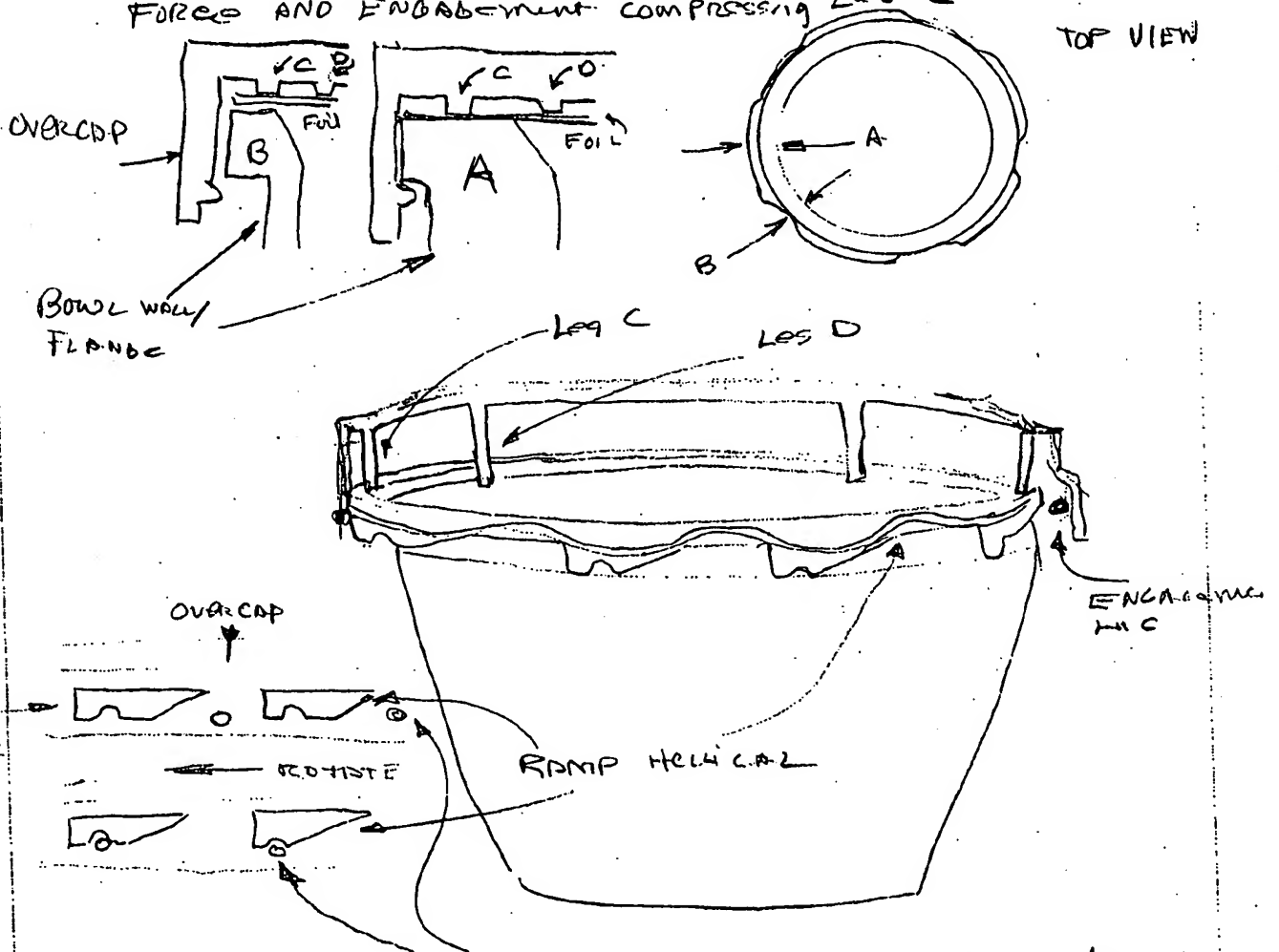
OVERCAP
UNDERSIDE



LEG D CAN BE ANY SHAPE TO RESTRAIN THE FLEXIBLE LID, TOWARD RING OR RINGS, A CENTRAL PAD OR RADIAL SECTIONS.

Rotational Design of Over cap to Create a Clamping Force and Engagement compressing Leg C

TOP VIEW



ENGAGEMENT LUGS ON INTERNAL VERTICAL
SURFACE OF OVER CAP

1. ROTATIONAL ASSEMBLY OF OVER CAP TO BOWL FLANGE
WITH CLAMPING LEG C AND/OR RESTRAINT OF FLEXIBLE FOIL
BY LEG D.

2. Ramped Helical and Engagement Pocket + Lugs

• Drawing show LUGS ON LIP + ENGAGEMENT HELICAL ON BOWL.
BUT IT COULD BE REVERSIBLE.

• THREADS COULD BE SUBSTITUTED FOR LUGS + HELICALS

THEREFORE:

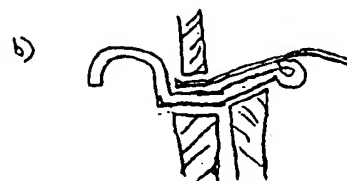
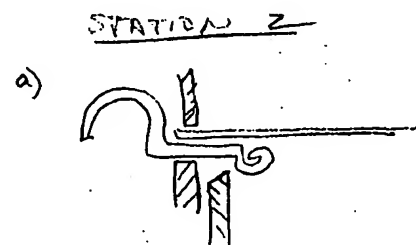
1.) Heat Seal must be accomplished in the FLAT AND REFORMED

2.) THE FOIL MUST BE CLAMPED COINCIDENTALLY OR PRIOR TO REFORMING TO AVOID RE-TEARING THE SEAL

THIS CAN BE ACCOMPLISHED IN PROGRESSIVE STATIONS ON THE LID MANUFACTURING LINE.

STATION 1. HEAT SEAL

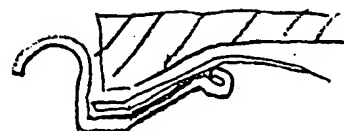
STATION 2 CLAMP FOIL AND REFORM



Seaming Chuck:



NORMAL CHUCK



RELIEVED CHUCK

CHUCK MUST BE RELIEVED 360° TO AVOID CRUSHING THE REFORMED SECTION.